


REMARKS

Claims 1-25 were in the Application as filed. Claims 1-25 were cancelled without prejudice in a preliminary amendment, and new claims 26-81 were added. Claims 82-88 are added in the present amendment. Support for the new claims is found throughout the Application. For example, examples of nucleotide analogs and modified nucleotides for use in the invention are described on page 30 at lines 27-30, and the use of such analogs in the oligonucleotides of the invention is described, *e.g.*, on page 11, lines 16-20. An example of target nucleic acids comprising nucleotide analogs is provided in Example 18 on page 152, lines 19-21. Additional support for the use of oligonucleotides and cleavage structures comprising nucleotide analogs is provided, for example, in Example 23, from page 173, line 23, to page 181, line 29. Support for the cleavage structures of the new claims is found, for example, on pages 78 through 80 and Figures 1B, 16, 29, and 67.

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Appendix 1
Version With Markings To Show Changes Made
in Accordance with 37 C.F.R. § 1.121(b)(1)(iii)

In The Claims:

Please add the following claims:

82. A method for detecting a target sequence, comprising cleaving a cleavage structure with a cleavage agent to generate a labeled cleavage product, wherein said cleavage structure comprises:

- d) a first nucleic acid molecule comprising a first region and a second region, said first region upstream of said second region;
- e) a second nucleic acid molecule that is complementary to said first region, said second nucleic acid molecule having a 3' end that is not extendable by a polymerase when said second nucleic acid molecule is hybridized to said first nucleic acid molecule; and
- f) a third nucleic acid molecule that is complementary to said second region, said third nucleic acid molecule comprising a label, wherein said labeled cleavage product comprises said label following cleavage of said cleavage structure.

83. The method of Claim 82, wherein said cleavage agent comprises a 5' nuclease.

84. The method of Claim 83, wherein said cleavage agent comprises a thermostable 5' nuclease.

85. The method of Claim 84, wherein said thermostable 5' nuclease comprises Taq polymerase.

86. The method of Claim 82, wherein said first, second, or third nucleic acid molecule comprises a nucleotide analogue.

87. The method of Claim 82, wherein said 3' end that is not extendable by a polymerase comprises a nucleotide that the is not complementary to said first nucleic acid molecule when said second nucleic acid molecule is hybridized to said first nucleic acid molecule.

88. The method of Claim 82, wherein said first region and said second region of said first nucleic acid molecule are separated from each other by at least one nucleotide distance.

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